

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed October 18, 2006. For the reasons given below, Applicants submit that the pending claims are patentably distinguishable over the cited reference. Applicants, therefore, respectfully request reconsideration and favorable action in this case.

**Section 102 Rejections**

The Office Action rejects Claims 12-13 and 15-19 under 35 U.S.C. § 102(b) as being anticipated by Noe et al., "Comparison of Polarization Handling Methods in Coherent Optical System" ("Noe").

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claims" and "[t]he elements must be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131 (*emphasis added*). In regard to inherency of a reference, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." M.P.E.P. § 2112 (citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993) (*emphasis original*)). Thus, in relying upon the theory of inherency, an Examiner must provide a basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. M.P.E.P. § 2112 (citing *Ex Parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. & App. and Inter. 1990) (*emphasis original*)).

Independent Claim 12, as amended, recites the following limitations:

A method for receiving a signal, comprising:  
generating a polarized local signal based on receiver-side  
feedback;

combining an ingress traffic signal with the polarized local signal to generate a combined signal, wherein the ingress traffic signal is compensated for polarization mode dispersion;

splitting the combined signal into a first split signal and second split signal;

detecting the first split signal; and  
detecting the second split signal.

Applicants agree with the Examiner's position that this claim does not explicitly require that the polarization of the local signal be controlled. However, Applicants respectfully submit that this claim is allowable at least because *Noe* does not disclose that "the ingress traffic signal is compensated for polarization mode dispersion," a limitation that has been added from canceled Claim 13. Regarding Claim 13, the Office Action states that this limitation is inherently taught in *Noe* (but citing to Figures 10-13). As noted above, when relying upon the theory of inherency, the M.P.E.P. requires that an Examiner provide a basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. Applicants respectfully submit that the Examiner has not met this requirement and that such a requirement cannot be met in this case. Nothing in Figures 10-13 indicates or implies that the ingress signal is compensated for polarization mode dispersion. Furthermore, Applicants respectfully submit that a polarization mode dispersion compensating device is not shown in Figure 9 of *Noe* (which shows the details of the experimental communication system setup discussed in the paper).

For at least this reasons, Applicants respectfully submit that each and every limitation of Claim 12 is not disclosed in *Noe* and thus request reconsideration and allowance of Claim 12, as well as those claims that depend from Claim 12.

### **Section 103 Rejections**

The Office Action rejects Claims 14, 37-50 and 52 under 35 U.S.C. § 103(a) as being unpatentable over *Noe* in view of the Brain article. Independent Claims 37 and 52 recite limitations that are similar, although not identical, to the limitations of Claim 12 (including reciting that the received optical signal is compensated for polarization mode dispersion). Therefore, Applicants respectfully submit that Claims 37 and 52 are allowable at least for the

same reasons as discussed above with reference to Claim 12. Thus, Applicants request reconsideration and allowance of Claims 37 and 52, as well as the claims that depend from independent Claim 37.

**CONCLUSION**

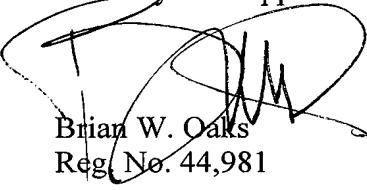
Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all the pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further requests that the Examiner contact the undersigned attorney to schedule the telephone conference.

Applicants believe no fees are due, however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicants



Brian W. Oaks  
Reg. No. 44,981

Date: November 15, 2006

Correspondence Address:

**Customer Number**

**05073**